

SEQUENCE LISTING

<110> Schor, Seth Lawrence  
Schor, Ana Marie

<120> Polypeptides, Polynucleotides, and Uses  
Thereof

<130> ERP01.003APC

<140> 09581651

<141> 2000-10-10

<150> PCT/GB98/03766

<151> 1998-12-15

<150> GB 9726539.1

<151> 1997-12-16

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<170> FastSEQ for Windows Version 4.0

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<212> PRT

<213> Homo sapiens

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Gln Cys Leu Gly Thr Ala Val Pro Ser Thr Gly Ala Ser Lys Ser Lys  
35 40 45

Arg Gln Ala Gln Gln Met Val Gln Pro Gln Ser Pro Val Ala Val Ser  
50 55 60

Gln Ser Lys Pro Gly Cys Tyr Asp Asn Gly Lys His Tyr Gln Ile Asn  
65 70 75 80

Gln Gln Trp Glu Arg Thr Tyr Leu Gly Asn Ala Leu Val Cys Thr Cys  
85 90 95

Tyr Gly Gly Ser Arg Gly Phe Asn Cys Glu Ser Lys Pro Glu Ala Glu  
100 105 110

Glu Thr Cys Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp  
115 120 125

Thr Tyr Glu Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile  
130 135 140

Gly Ala Gly Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His  
145 150 155 160

Glu Gly Gly Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His  
165 170 175

Glu Thr Gly Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys  
180 185 190

Gly Glu Trp Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe Asp His Ala  
195 200 205

Ala Gly Thr Ser Tyr Val Val Gly Glu Thr Trp Glu Lys Pro Tyr Gln  
210 215 220  
Gly Trp Met Met Val Asp Cys Thr Cys Leu Gly Glu Gly Ser Gly Arg  
225 230 235 240  
Ile Thr Cys Thr Ser Arg Asn Arg Cys Asn Asp Gln Asp Thr Arg Thr  
245 250 255  
Ser Tyr Arg Ile Gly Asp Thr Trp Ser Lys Lys Asp Asn Arg Gly Asn  
260 265 270  
Leu Leu Gln Cys Ile Cys Thr Gly Asn Gly Arg Gly Glu Trp Lys Cys  
275 280 285  
Glu Arg His Thr Ser Val Gln Thr Thr Ser Ser Gly Ser Gly Pro Phe  
290 295 300  
Thr Asp Val Arg Ala Ala Val Tyr Gln Pro Gln Pro His Pro Gln Pro  
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Pro Pro Tyr Gly His Cys Val Thr Asp Ser Gly Val Val Tyr Ser Val  
325 330 335  
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Cys Leu Gly Asn Gly Val Ser Cys Gln Glu Thr Ala Val Thr Gln Thr  
355 360 365  
Tyr Gly Gly Asn Ser Asn Gly Glu Pro Cys Val Leu Pro Phe Thr Tyr  
370 375 380  
Asn Asp Arg Thr Asp Ser Thr Thr Ser Asn Tyr Glu Gln Asp Gln Lys  
385 390 395 400  
Tyr Ser Phe Cys Thr Asp His Thr Val Leu Val Gln Thr Arg Gly Gly  
405 410 415  
Asn Ser Asn Gly Ala Leu Cys His Phe Pro Phe Leu Tyr Asn Asn His  
420 425 430  
Asn Tyr Thr Asp Cys Thr Ser Glu Gly Arg Arg Asp Asn Met Lys Trp  
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Pro Met Ala Ala His Glu Glu Ile Cys Thr Thr Asn Glu Gly Val Met  
465 470 475 480  
Tyr Arg Ile Gly Asp Gln Trp Asp Lys Gln His Asp Met Gly His Met  
485 490 495  
Met Arg Cys Thr Cys Val Gly Asn Gly Arg Gly Glu Trp Thr Cys Ile  
500 505 510  
Ala Tyr Ser Gln Leu Arg Asp Gln Cys Ile Val Asp Asp Ile Thr Tyr  
515 520 525  
Asn Val Asn Asp Thr Phe His Lys Arg His Glu Glu Gly His Met Leu  
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Asn Cys Thr Cys Phe Gly Gln Gly Arg Gly Arg Trp Lys Cys Asp Pro  
545 550 555 560  
Val Asp Gln Cys Gln Asp Ser Glu Thr Gly Thr Phe Tyr Gln Ile Gly  
565 570 575  
Asp Ser Trp Glu Lys Tyr Val His Gly Val Arg Tyr Gln Cys Tyr Cys  
580 585 590  
Tyr Gly Arg Gly Ile Gly Glu Trp His Cys Gln Pro Leu Gln Thr Tyr  
595 600 605  
Pro Ser Ser Ser Gly Pro Val Glu Val Phe Ile Thr Glu Thr Pro Ser  
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Gln Pro Asn Ser His Pro Ile Gln Trp Asn Ala Pro Gln Pro Ser His  
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35 40 45  
Lys Pro Gly Cys Tyr Asp Asn Gly Lys His Tyr Gln Ile Asn Gln Gln  
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Trp Glu Arg Thr Tyr Leu Gly Asn Ala Leu Val Cys Thr Cys Tyr Gly  
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Gly Ser Arg Gly Phe Asn Cys Glu Ser Lys Pro Glu Ala Glu Glu Thr  
85 90 95  
Cys Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp Thr Tyr  
100 105 110  
Glu Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile Gly Ala  
115 120 125  
Gly Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His Glu Gly  
130 135 140  
Gly Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His Glu Thr  
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Gly Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys Gly Glu  
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Trp Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe Asp His Ala Ala Gly  
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Thr Ser Tyr Val Val Gly Glu Thr Trp Glu Lys Pro Tyr Gln Gly Trp  
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Met Met Val Asp Cys Thr Cys Leu Gly Glu Gly Ser Gly Arg Ile Thr  
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Cys Thr Ser Arg Asn Arg Cys Asn Asp Gln Asp Thr Arg Thr Ser Tyr  
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Arg Ile Gly Asp Thr Trp Ser Lys Lys Asp Asn Arg Gly Asn Leu Leu  
245 250 255  
Gln Cys Ile Cys Thr Gly Asn Gly Arg Gly Glu Trp Lys Cys Glu Arg  
260 265 270  
His Thr Ser Val Gln Thr Thr Ser Ser Gly Ser Gly Pro Phe Thr Asp  
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Val Arg Ala Ala Val Tyr Gln Pro Gln Pro His Pro Gln Pro Pro Pro  
290 295 300  
Tyr Gly His Cys Val Thr Asp Ser Gly Val Val Tyr Ser Val Gly Met  
305 310 315 320  
Gln Trp Leu Lys Thr Gln Gly Asn Lys Gln Met Leu Cys Thr Cys Leu  
325 330 335  
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Gly Asn Ser Asn Gly Glu Pro Cys Val Leu Pro Phe Thr Tyr Asn Asp  
355 360 365  
Arg Thr Asp Ser Thr Thr Ser Asn Tyr Glu Gln Asp Gln Lys Tyr Ser  
370 375 380

Phe Cys Thr Asp His Thr Val Leu Val Gln Thr Arg Gly Gly Asn Ser  
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 Thr Asp Cys Thr Ser Glu Gly Arg Arg Asp Asn Met Lys Trp Cys Gly  
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 Thr Thr Gln Asn Tyr Asp Ala Asp Gln Lys Phe Gly Phe Cys Pro Met  
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 Ile Gly Asp Gln Trp Asp Lys Gln His Asp Met Gly His Met Met Arg  
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 Cys Thr Cys Val Gly Asn Gly Arg Gly Glu Trp Thr Cys Ile Ala Tyr  
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 Ser Gln Leu Arg Asp Gln Cys Ile Val Asp Asp Ile Thr Tyr Asn Val  
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     565 570 575  
 Arg Gly Ile Gly Glu Trp His Cys Gln Pro Leu Gln Thr Tyr Pro Ser  
     580 585 590  
 Ser Ser Gly Pro Val Glu Val Phe Ile Thr Glu Thr Pro Ser Gln Pro  
     595 600 605  
 Asn Ser His Pro Ile Gln Trp Asn Ala Pro Gln Pro Ser His Ile Ser  
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Leu Cys Leu Gly Thr Ala Val Pro Ser Thr Gly Ala Ser Lys Ser Lys  
35 40 45  
Arg Gln Ala Gln Gln Met Val Gln Pro Gln Ser Pro Val Ala Val Ser  
50 55 60  
Gln Ser Lys Pro Gly Cys Tyr Asp Asn Gly Lys His Tyr Gln Ile Asn  
65 70 75 80  
Gln Gln Trp Glu Arg Thr Tyr Leu Gly Asn Val Leu Val Cys Thr Cys  
85 90 95

Tyr Gly Gly Ser Arg Gly Phe Asn Cys Glu Ser Lys Pro Glu Ala Glu  
100 105 110  
Glu Thr Cys Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp  
115 120 125  
Thr Tyr Glu Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile  
130 135 140  
Gly Ala Gly Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His  
145 150 155 160  
Glu Gly Gly Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His  
165 170 175  
Glu Thr Gly Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys  
180 185 190  
Gly Glu Trp Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe Asp His Ala  
195 200 205  
Ala Gly Thr Ser Tyr Val Val Gly Glu Thr Trp Glu Lys Pro Tyr Gln  
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Gly Trp Met Met Val Asp Cys Thr Cys Leu Gly Glu Gly Ser Gly Arg  
225 230 235 240  
Ile Thr Cys Thr Ser Arg Asn Arg Cys Asn Asp Gln Asp Thr Arg Thr  
245 250 255  
Ser Tyr Arg Ile Gly Asp Thr Trp Ser Lys Lys Asp Asn Arg Gly Asn  
260 265 270  
Leu Leu Gln Cys Ile Cys Thr Gly Asn Gly Arg Gly Glu Trp Lys Cys  
275 280 285  
Glu Arg His Thr Ser Val Gln Thr Thr Ser Ser Gly Ser Gly Pro Phe  
290 295 300  
Thr Asp Val Arg Ala Ala Val Tyr Gln Pro Gln Pro His Pro Gln Pro  
305 310 315 320  
Pro Pro Tyr Gly His Cys Val Thr Asp Ser Gly Val Val Tyr Ser Val  
325 330 335  
Gly Met Gln Trp Leu Lys Thr Gln Gly Asn Lys Gln Met Leu Cys Thr  
340 345 350  
Cys Leu Gly Asn Gly Val Ser Cys Gln Glu Thr Ala Val Thr Gln Thr  
355 360 365  
Tyr Gly Gly Asn Ser Asn Gly Glu Pro Cys Val Leu Pro Phe Thr Tyr  
370 375 380  
Asn Gly Arg Thr Phe Tyr Ser Cys Thr Thr Glu Gly Arg Gln Asp Gly  
385 390 395 400  
His Leu Trp Cys Ser Thr Thr Ser Asn Tyr Glu Gln Asp Gln Lys Tyr  
405 410 415  
Ser Phe Cys Thr Asp His Thr Val Leu Val Gln Thr Gln Gly Gly Asn  
420 425 430  
Ser Asn Gly Ala Leu Cys His Phe Pro Phe Leu Tyr Asn Asn His Asn  
435 440 445  
Tyr Thr Asp Cys Thr Ser Glu Gly Arg Arg Asp Asn Met Lys Trp Cys  
450 455 460  
Gly Thr Thr Gln Asn Tyr Asp Ala Asp Gln Lys Phe Gly Phe Cys Pro  
465 470 475 480  
Met Ala Ala His Glu Glu Ile Cys Thr Thr Asn Glu Gly Val Met Tyr  
485 490 495  
Arg Ile Gly Asp Gln Trp Asp Lys Gln His Asp Met Gly His Met Met  
500 505 510  
Arg Cys Thr Cys Val Gly Asn Gly Arg Gly Glu Trp Thr Cys Tyr Ala  
515 520 525  
Tyr Ser Gln Leu Arg Asp Gln Cys Ile Val Asp Asp Ile Thr Tyr Asn  
530 535 540  
Val Asn Asp Thr Phe His Lys Arg His Glu Glu Gly His Met Leu Asn

545	550	555	560												
Cys	Thr	Cys	Phe	Gly	Gln	Gly	Arg	Gly	Arg	Trp	Lys	Cys	Asp	Pro	Val
565										570					575
Asp	Gln	Cys	Gln	Asp	Ser	Glu	Thr	Gly	Thr	Phe	Tyr	Gln	Ile	Gly	Asp
580								585					590		
Ser	Trp	Glu	Lys	Tyr	Val	His	Gly	Val	Arg	Tyr	Gln	Cys	Tyr	Cys	Tyr
595							600				605				
Gly	Arg	Gly	Ile	Gly	Glu	Trp	His	Cys	Gln	Pro	Leu	Gln	Thr	Tyr	Pro
610					615					620					
Ser	Ser	Ser	Gly	Pro	Val	Glu	Val	Phe	Ile	Thr	Glu	Thr	Pro	Ser	Gln
625					630				635					640	
Pro	Asn	Ser	His	Pro	Ile	Gln	Trp	Asn	Ala	Pro	Gln	Pro	Ser	His	Ile
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Ser	Lys	Tyr	Ile	Leu	Arg	Trp	Arg	Pro	Lys	Asn	Ser	Val	Gly	Arg	Trp
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Lys	Glu	Ala	Thr	Ile	Pro	Gly	His	Leu	Asn	Ser	Tyr	Thr	Ile	Lys	Gly
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Leu	Lys	Pro	Gly	Val	Val	Tyr	Glu	Gly	Gln	Leu	Ile	Ser	Ile	Gln	Gln
					690			695			700				
Tyr	Gly	His	Gln	Glu	Val	Thr	Arg	Phe	Asp	Phe	Thr	Thr	Thr	Ser	Thr
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<220>  
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<222> 660, 663, 667, 701  
<223> Xaa = Any Amino Acid

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								20		25			30		
Leu	Cys	Leu	Gly	Thr	Ala	Val	Pro	Ser	Thr	Gly	Ala	Ser	Lys	Ser	Lys
								35		40		45			
Arg	Gln	Ala	Gln	Gln	Met	Val	Gln	Pro	Gln	Ser	Pro	Val	Ala	Val	Ser
						50		55			60				
Gln	Ser	Lys	Pro	Gly	Cys	Tyr	Asp	Asn	Gly	Lys	His	Tyr	Gln	Ile	Asn
						65		70		75			80		
Gln	Gln	Trp	Glu	Arg	Thr	Tyr	Leu	Gly	Asn	Val	Leu	Val	Cys	Thr	Cys
						85			90			95			
Tyr	Gly	Gly	Ser	Arg	Gly	Phe	Asn	Cys	Glu	Ser	Lys	Pro	Glu	Ala	Glu
						100			105			110			
Glu	Thr	Cys	Phe	Asp	Lys	Tyr	Thr	Gly	Asn	Thr	Tyr	Arg	Val	Gly	Asp
						115			120			125			
Thr	Tyr	Glu	Arg	Pro	Lys	Asp	Ser	Met	Ile	Trp	Asp	Cys	Thr	Cys	Ile
						130			135			140			
Gly	Ala	Gly	Arg	Gly	Arg	Ile	Ser	Cys	Thr	Ile	Ala	Asn	Arg	Cys	His
						145			150			155			160
Glu	Gly	Gly	Gln	Ser	Tyr	Lys	Ile	Gly	Asp	Thr	Trp	Arg	Arg	Pro	His
						165			170			175			
Glu	Thr	Gly	Gly	Tyr	Met	Leu	Glu	Cys	Val	Cys	Leu	Gly	Asn	Gly	Lys

	180	185	190												
Gly	Glu	Trp	Thr	Cys	Lys	Pro	Ile	Ala	Glu	Lys	Cys	Phe	Asp	His	Ala
							195		200						205
Ala	Gly	Thr	Ser	Tyr	Val	Val	Gly	Glu	Thr	Trp	Glu	Lys	Pro	Tyr	Gln
							210		215						220
Gly	Trp	Met	Met	Val	Asp	Cys	Thr	Cys	Leu	Gly	Glu	Gly	Ser	Gly	Arg
							225		230						240
Ile	Thr	Cys	Thr	Ser	Arg	Asn	Arg	Cys	Asn	Asp	Gln	Asp	Thr	Arg	Thr
							245		250						255
Ser	Tyr	Arg	Ile	Gly	Asp	Thr	Trp	Ser	Lys	Lys	Asp	Asn	Arg	Gly	Asn
							260		265						270
Leu	Leu	Gln	Cys	Ile	Cys	Thr	Gly	Asn	Gly	Arg	Gly	Glu	Trp	Lys	Cys
							275		280						285
Glu	Arg	His	Thr	Ser	Val	Gln	Thr	Thr	Ser	Ser	Gly	Ser	Gly	Pro	Phe
							290		295						300
Thr	Asp	Val	Arg	Ala	Ala	Val	Tyr	Gln	Pro	Gln	Pro	His	Pro	Gln	Pro
							305		310						320
Pro	Pro	Tyr	Gly	His	Cys	Val	Thr	Asp	Ser	Gly	Val	Val	Tyr	Ser	Val
							325		330						335
Gly	Met	Gln	Trp	Leu	Lys	Thr	Gln	Gly	Asn	Lys	Gln	Met	Leu	Cys	Thr
							340		345						350
Cys	Leu	Gly	Asn	Gly	Val	Ser	Cys	Gln	Glu	Thr	Ala	Val	Thr	Gln	Thr
							355		360						365
Tyr	Gly	Gly	Asn	Ser	Asn	Gly	Glu	Pro	Cys	Val	Leu	Pro	Phe	Thr	Tyr
							370		375						380
Asn	Gly	Arg	Thr	Ser	Thr	Thr	Ser	Asn	Tyr	Glu	Gln	Asp	Gln	Lys	Tyr
							385		390						400
Ser	Phe	Cys	Thr	Asp	His	Thr	Val	Leu	Val	Gln	Thr	Gln	Gly	Gly	Asn
							405		410						415
Ser	Asn	Gly	Ala	Leu	Cys	His	Phe	Pro	Phe	Leu	Tyr	Asn	Asn	His	Asn
							420		425						430
Tyr	Thr	Asp	Cys	Thr	Ser	Glu	Gly	Arg	Arg	Asp	Asn	Met	Lys	Trp	Cys
							435		440						445
Gly	Thr	Thr	Gln	Asn	Tyr	Asp	Ala	Asp	Gln	Lys	Phe	Gly	Phe	Cys	Pro
							450		455						460
Met	Ala	Ala	His	Glu	Glu	Ile	Cys	Thr	Thr	Asn	Glu	Gly	Val	Met	Tyr
							465		470						480
Arg	Ile	Gly	Asp	Gln	Trp	Asp	Lys	Gln	His	Asp	Met	Gly	His	Met	Met
							485		490						495
Arg	Cys	Thr	Cys	Val	Gly	Asn	Gly	Arg	Gly	Glu	Trp	Thr	Cys	Tyr	Ala
							500		505						510
Tyr	Ser	Gln	Leu	Arg	Asp	Gln	Cys	Ile	Val	Asp	Asp	Ile	Thr	Tyr	Asn
							515		520						525
Val	Asn	Asp	Thr	Phe	His	Lys	Arg	His	Glu	Glu	Gly	His	Met	Leu	Asn
							530		535						540
Cys	Thr	Cys	Phe	Gly	Gln	Gly	Arg	Gly	Arg	Trp	Lys	Cys	Asp	Pro	Val
							545		550						560
Asp	Gln	Cys	Gln	Asp	Ser	Glu	Thr	Gly	Thr	Phe	Tyr	Gln	Ile	Gly	Asp
							565		570						575
Ser	Trp	Glu	Lys	Tyr	Val	His	Gly	Val	Arg	Tyr	Gln	Cys	Tyr	Cys	Tyr
							580		585						590
Gly	Arg	Gly	Ile	Gly	Glu	Trp	His	Cys	Gln	Pro	Leu	Gln	Thr	Tyr	Pro
							595		600						605
Ser	Ser	Ser	Gly	Pro	Val	Glu	Val	Phe	Ile	Thr	Glu	Thr	Pro	Ser	Gln
							610		615						620
Pro	Asn	Ser	His	Pro	Ile	Gln	Trp	Asn	Ala	Pro	Gln	Pro	Ser	His	Ile
							625		630						640

Ser Lys Tyr Ile Leu Arg Trp Arg Pro Val Ser Ile Pro Pro Arg Asn  
645 650 655  
Leu Gly Tyr Xaa Val Ser Xaa Ser Gln Phe Xaa Trp Phe Leu Phe Phe  
660 665 670  
Pro Ala Phe Glu Pro Thr Thr Leu Ile Asn Tyr Ser Tyr Ser Ile Tyr  
675 680 685  
Tyr Ile Cys Leu Val Asn Lys Gln Tyr Val Val Asn Xaa Ile Asp  
690 695 700

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<213> Homo sapiens

<400> 19  
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1 5 10 15  
Leu Asn

<210> 20  
<211> 31  
<212> PRT  
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<400> 20  
Met Leu Arg Gly Pro Gly Pro Gly Leu Leu Leu Ala Val Gln Cys  
1 5 10 15  
Leu Gly Thr Ala Val Pro Ser Thr Gly Ala Ser Lys Ser Lys Arg  
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<210> 21  
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1 5 10 15  
Ser Lys Pro Gly  
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<400> 22  
Cys Tyr Asp Asn Gly Lys His Tyr Gln Ile Asn Gln Gln Trp Glu Arg  
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Thr Tyr Leu Gly Asn Ala Leu Val Cys Thr Cys Tyr Gly Gly Ser Arg  
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Gly Phe Asn Cys Glu Ser Lys Pro Glu Ala Glu Glu Thr

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40

45

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<400> 23  
Cys Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp Thr Tyr  
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Glu Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile Gly Ala  
20 25 30  
Gly Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg  
35 40

<210> 24  
<211> 45  
<212> PRT  
<213> Homo sapiens

<400> 24  
Cys His Glu Gly Gly Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg  
1 5 10 15  
Pro His Glu Thr Gly Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn  
20 25 30  
Gly Lys Gly Glu Trp Thr Cys Lys Pro Ile Ala Glu Lys  
35 40 45

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<213> Homo sapiens

<400> 25  
Cys Phe Asp His Ala Ala Gly Thr Ser Tyr Val Val Gly Glu Thr Trp  
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Glu Lys Pro Tyr Gln Gly Trp Met Met Val Asp Cys Thr Cys Leu Gly  
20 25 30  
Glu Gly Ser Gly Arg Ile Thr Gly Thr Ser Arg Asn Arg  
35 40 45

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<400> 26  
Cys Asn Asp Gln Asp Thr Arg Thr Ser Tyr Arg Ile Gly Asp Thr Trp  
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Ser Lys Lys Asp Asn Arg Gly Asn Leu Leu Gln Cys Ile Cys Thr Gly  
20 25 30  
Asn Gly Arg Gly Glu Trp Lys Cys Glu Arg  
35 40

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<212> PRT  
<213> Homo sapiens

<400> 27  
His Thr Ser Val Gln Thr Thr Ser Ser Gly Ser Gly Pro Phe Thr Asp  
1 5 10 15  
Val Arg Ala Ala Val Tyr Gln Pro Gln Pro His Pro Gln Pro Pro Pro  
20 25 30  
Tyr Gly His  
35

<210> 28  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 28  
Cys Val Thr Asp Ser Gly Val Val Tyr Ser Val Gly Met Gln Trp Leu  
1 5 10 15  
Lys Thr Gln Gly Asn Lys Gln Met Leu Cys Thr Cys Leu Gly Asn Gly  
20 25 30  
Val Ser Cys Gln Glu  
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<210> 29  
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<400> 29  
Thr Ala Val Thr Gln Thr Tyr Gly Gly Asn Ser Asn Gly Glu Pro Cys  
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Val Leu Pro Phe Thr Tyr Asn Asp Arg Thr Asp Ser Thr Thr Ser Asn  
20 25 30  
Tyr Glu Gln Asp Gln Lys Tyr Ser Phe Cys Thr Asp His  
35 40 45

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His Phe Pro Phe Leu Tyr Asn Asn His Asn Tyr Thr Asp Cys Thr Ser  
20 25 30  
Glu Gly Arg Arg Asp Asn Met Lys Trp Cys Gly Thr Thr Gln Asn Tyr  
35 40 45  
Asp Ala Asp Gln Lys Phe Gly Phe Cys Pro Met Ala Ala His Glu Glu

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Ile  
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<212> PRT  
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<400> 31  
Cys Thr Thr Asn Glu Gly Val Met Tyr Arg Ile Gly Asp Gln Trp Asp  
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Lys Gln His Asp Met Gly His Met Met Arg Cys Thr Cys Val Gly Asn  
20                 25                 30  
Gly Arg Gly Glu Trp Thr Cys Ile Ala Tyr Ser Gln Leu Arg Asp Gln  
35                 40                 45

<210> 32  
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<400> 32  
Cys Ile Val Asp Asp Ile Thr Tyr Asn Val Asn Asp Thr Phe His Lys  
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Arg His Glu Glu Gly His Met Leu Asn Cys Thr Cys Phe Gly Gln Gly  
20                 25                 30  
Arg Gly Arg Trp Lys Cys Asp Pro Val Asp Gln  
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<210> 33  
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Cys Gln Asp Ser Glu Thr Gly Thr Phe Tyr Gln Ile Gly Asp Ser Trp  
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Glu Lys Tyr Val His Gly Val Arg Tyr Gln Cys Tyr Cys Tyr Gly Arg  
20                 25                 30  
Gly Ile Gly Glu Trp His Cys Gln Pro Leu Gln Thr Tyr Pro Ser Ser  
35                 40                 45

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<400> 34  
Ser Gly Pro Val Glu Val Phe Ile Thr Glu Thr Pro Ser Gln Pro Asn  
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Ser His Pro Ile Gln Trp Asn Ala Pro Gln Pro Ser His Ile Ser Lys  
20                 25                 30

Tyr Ile Leu Arg Trp Arg Pro  
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<400> 35  
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Val Ser  
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Ser Tyr Gln Phe  
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<210> 38  
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Trp Phe Leu Phe Phe Pro Ala Phe Glu Pro Thr Thr Leu Ile Asn Tyr  
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Ser Tyr Ser Ile Tyr Tyr Ile Cys Leu Val Asn Lys Gln Tyr Val Val  
20 25 30  
Asn

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Ile Asp Leu  
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<210> 40  
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<400> 40  
Thr Glu Lys Lys Lys Lys Lys Lys  
1 5

<210> 41  
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<212> PRT  
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<400> 41  
Val Ser Ile Pro Pro Arg Asn Leu Gly Tyr  
1 5 10